

REMARKS/ARGUMENTS

This amendment responds to the office action dated May 14, 2007.

The Examiner rejected claims 1-7, 9-34, 36-56, and 58-86 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Christel, "Adjustable Filmstrips and Skims as Abstractions for a Digital Video Library" IEEE Advances in Digital Libraries Conference, May 1999 (hereinafter Christel), in view of Vasconcelos et al., "Bayesian Modeling of Video Editing and Structure: Semantic Features for Video Summarization and Browsing" (hereinafter Vasconcelos) and in further view of Ahmad et al., U.S. Patent No. 6,880,171 (hereinafter Ahmad). Claim 38 has been canceled, as it depended from previously-canceled claim 35. The applicant respectfully maintains that the Examiner's rejection of the remaining claims is improper, as each of independent claims 1, 29, and 56 patentably distinguish over the cited prior art.

With respect to independent claim 1, that claim recites the limitations of (1) "summarizing a video . . . based upon an event characterized by a semantic event that includes a sports play" and "displaying [a] relative location for a first type of semantic characterization of said sports play in said video using a first visual indication and displaying said relative location for a second type of semantic characterization of a said sports play in said video using a second visual indication different from said first visual indication." The Examiner contends that the first limitation is obvious in view of Christel, and that the third limitation is obvious in view of the combination of Christel, Vasconcelos, and Ahmad. Both contentions are incorrect.

All three references have been thoroughly described in the applicant's amendment dated February 13, 2007. In that amendment, the applicant first argued that Christel failed to disclose the limitation of summarizing a video based upon "a play" and specifically pointed out that the method disclosed by Christel is not appropriate for summarizing sports videos, but instead is only disclosed as summarizing news programs and documentaries due to the inherent overlap between the semantic content shown in a video segment, and audio commentary associated with the video segment that is descriptive of the content of the segment. Stated differently, the applicant argued that the prior art failed to *enable* the limitations now claimed in the present application, a defect fatal to the Examiner's rejection.

In response, the Examiner simply asserts that news programs summarized by Christel might include a sports segment, which then might include videos of “plays.” This argument is not fully responsive, however. First, even if a summary of the news would include a sports segment, the method of Christel would not reliably identify different semantic types of sports plays shown, a necessary step for applicant’s limitation of “displaying [a] relative location for a first type of semantic characterization of said play in said video using a first visual indication and displaying said relative location for a second type of semantic characterization of a said play in said video using a second visual indication different from said first visual indication.” For example, a video news program summarized by Christel might have a sports segment in which the video merely shows a scrolling scoreboard with the narrator indicating that team X scored 3 touchdowns against team Y. The audio of the word “touchdown” would then falsely imply that the video shows a touchdown, when in truth it displays nothing more than text. Similarly, when highlight clips showing video of sacks, slam dunks, double plays, etc. are actually played, the audio corresponding to those respective segments would not reliably either (1) indicate that a sack etc. is being shown or (2) be timed to coincide with the segment.

Thus, since Christel fails to *enable* the ability to extract video segments of identified different semantic types of plays, the Examiner’s assertion that the limitation, quoted in the preceding paragraph, is obvious, fails. It appears as if the Examiner is conflating the initial limitation, in claim 1, of summarizing a video containing a play, with the later limitation requiring that different semantic characterizations of plays be visually distinguishable on a timeline; simply because the Examiner has found the former, does not mean that the latter is disclosed or obvious in view of the combination.

The applicant reiterates the arguments made in the preceding amendment, that *none* of the cited references enable the limitation of “displaying [a] relative location for a first type of semantic characterization of said play in said video using a first visual indication and displaying said relative location for a second type of semantic characterization of a said play in said video using a second visual indication different from said first visual indication.” Vasconcelos expressly disavows the ability to summarize a video at that level of detail. *See* Vasconcelos at p. 153 section 1 paragraph 4; *See also Id.* at p. 156, section 5.3. Ahmad merely discloses shading

videos different colors based on whether they have been already watched or not. Because the prior art fails to enable that claim limitation, the Examiner's rejection is improper.

Moreover, the applicant notes that the Examiner has failed to respond to the applicant's previous argument that the asserted combination would negate the principle of operation of the primary reference, Christel. *See* Amendment dated February 13, 2007 at p. 17 lines 1-27 and p. 20 lines 14-18. Nor has the Examiner provided any reasoned explanation of how the summarization technique of Christel would be enhanced by the combination, i.e. how do Vasconcelos' timelines (showing high-level domain content) and Ahmed's visual crosshatching (showing whether a program has been watched or not) assist Christel in building a summary based on a user query. The Examiner makes broad assertions that Christel, for example, discloses that a segment's context is used to determine whether it matches a user's query (see Office Action at p. 22 lines 1-21), but offers no explanation as to how Vasconcelos' visual timelines assist in the *automatic* extraction of segments matching a text inquiry. In other words, how can a *visual* indicator presented *after* a summary is compiled possibly assist in the *automatic* extraction of segments for the summary *in the first instance*? The simple answer is that it does not.

In any event, claim 1 has been further amended to recite the additional limitations of "receiving from said user, by interaction with said graphical user interface, a selection of one of said plurality of segments" and "in response to said selection, presenting a selected one of said plurality of segments and not presenting at least one other of said plurality of segments." These limitations are not disclosed by the cited prior art. Christel, though disclosing an interactive display having a slider by which a user may change a compression ratio, and hence the size of segments built around match locations to a text inquiry, discloses no interface by which a user may select for individual viewing any particular one of the segments. Moreover, all of Christel's segments that match a user's text inquiry, and that are therefore displayed on the graphical user interface, are played back. Neither do any of the cited secondary references remotely suggest modifying Christel to provide such functionality. Vasconcelos merely discloses a non-interactive graphical display that permits a user to infer the genre of the movie whose content is displayed. Ahmad discloses no graphical display for selecting particular segments of a summarized program. Therefore, the additional limitations cited above patentably distinguish over the cited prior art.

The applicant further notes that dependent claims 6, 7, and 9-11 have each been amended to provide limitations not disclosed by any cited prior art reference. Therefore each of these dependent claims further distinguish over the cited prior art combination, for reasons in addition to those argued with respect to independent claim 1.

For each of these reasons, independent claim 1, as well as its dependent claims 2-7 and 9-28, distinguishes over the cited combination, and the rejection of these claims should be withdrawn.

Independent claims 29 and 56 are patentably distinguished over the cited prior art for the same reasons as is claim 1. In addition, claims 29 and 56 have each been amended to recite the further limitations of “displaying to a user at least one selector by which said user may interact with [an] interactive display to select for viewing selective identified ones of said plurality of segments” “receiving user-selections of identified ones of said plurality of segments” and “presenting user-selected ones of said plurality of different segments.” None of the cited references disclose these limitations. Therefore claims 29-34, 36, 37, 39-56, and 58-86 patentably distinguish over the cited prior art.

In view of the foregoing remarks, the applicant respectfully requests reconsideration and allowance of claims 1-7, 9-34, 36, 37, 39-56, and 58-86.

Respectfully Submitted



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